

Hiroko IWASAKI, S.N. 09/836,144  
Page 2

Dkt. 2271/50717-AY

**Listing of Claims**

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

Claims 1-11 (canceled)

12. (currently amended) A ~~protection layer for a~~ phase variation type data recording medium ~~including~~ comprising:

a reflective layer;

a phase variation type recording layer; [[substantially constituted by Ag, In, Sb and Te [[, the]]

a protection layer comprising:

SiO<sub>2</sub> as a basic material; and

a compound having a thermal conductivity greater than or equal to 10 W/m.deg when

in a bulk state, said compound comprising silicon nitride in a molar ratio with the

basic material of 10% to 85% silicon nitride,

wherein ~~said a~~ thermal conductivity of said protection layer allows amorphous portions to be recorded in said recording layer through heating followed by rapid cooling, while protecting other portions of said recording layer from heating during said recording to said amorphous portions.

Claims 13-15 (canceled).

16. (currently amended) A ~~protection layer for a~~ phase variation type data recording medium ~~including~~ comprising:

Hiroko IWASAKI, S.N. 09/836,144  
Page 3

Dkt. 2271/50717-AY

a reflective layer;

a phase variation type recording layer; [[substantially constituted by Ag, In, Sb and Te,  
the]]

a protection layer comprising;

SiO<sub>2</sub> as a basic material; and

a compound having a thermal conductivity greater than or equal to 10 W/m.deg when  
in a bulk state, said compound comprising one or more of the compounds selected  
from the group consisting of:

zinc oxide in a molar ratio with the basic material of 3% to 50% zinc oxide,

titanium oxide in a molar ratio with the basic material of 10% to 98%

titanium oxide,

magnesium oxide in a molar ratio with the basic material of 3% to 45%

magnesium oxide,

yttrium oxide in a molar ratio with the basic material of 10% to 80% yttrium

oxide,

gallium nitride in a molar ratio with the basic material of 1% to 30% gallium

nitride,

silicon nitride in a molar ratio with the basic material of 10% to 85% silicon

nitride,

aluminum nitride in a molar ratio with the basic material of 1% to 50%

aluminum nitride,

silicon carbide in a molar ratio with the basic material of 5% to 50% silicon

carbide, and

titanium carbide in a molar ratio with the basic material of 10% to 85%

Hiroko IWASAKI, S.N. 09/836,144  
Page 4

Dkt. 2271/50717-AY

titanium carbide,

wherein ~~said~~ a thermal conductivity of said protection layer allows amorphous portions to be recorded in said recording layer through heating followed by rapid cooling, while protecting other portions of said recording layer from heating during said recording to said amorphous portions.

17. (currently amended) A ~~protection layer~~ phase variation type data recording medium as claimed in claim 12, wherein the compound includes a combination of the silicon nitride and zinc oxide, aluminum oxide, titanium oxide, magnesium oxide, yttrium oxide, gallium nitride, aluminum nitride, and/or silicon carbide.

18. (currently amended) A ~~protection layer~~ phase variation type data recording medium as claimed in claim 12, wherein the protection layer is adapted for use with the phase variation type data recording layer in an EFM modulation type recording system.

19. (currently amended) A ~~protection layer~~ phase variation type data recording medium as claimed in claim 12, wherein the ~~protection layer~~ phase variation type data recording medium is adapted for use with a recording mechanism which uses melting and rapid cooling of the phase variation type data recording layer.

20. (currently amended) A ~~protection layer~~ phase variation type data recording medium as claimed in claim 16, wherein the protection layer is adapted for use with the phase variation type data recording layer in an EFM modulation type recording system.

Hiroko IWASAKI, S.N. 09/836,144  
Page 5

Dkt. 2271/50717-AY

21. (currently amended) A ~~protection layer~~ phase variation type data recording medium as claimed in claim 16, wherein the protection layer is adapted for use with a recording mechanism which uses melting and rapid cooling of the phase variation type data recording layer.

22. (new) A phase variation type data recording medium as claimed in claim 12, wherein the phase variation type recording layer is substantially constituted by Ag, In, Sb and Te.

23. (new) A phase variation type data recording medium as claimed in claim 16, wherein the phase variation type recording layer is substantially constituted by Ag, In, Sb and Te.